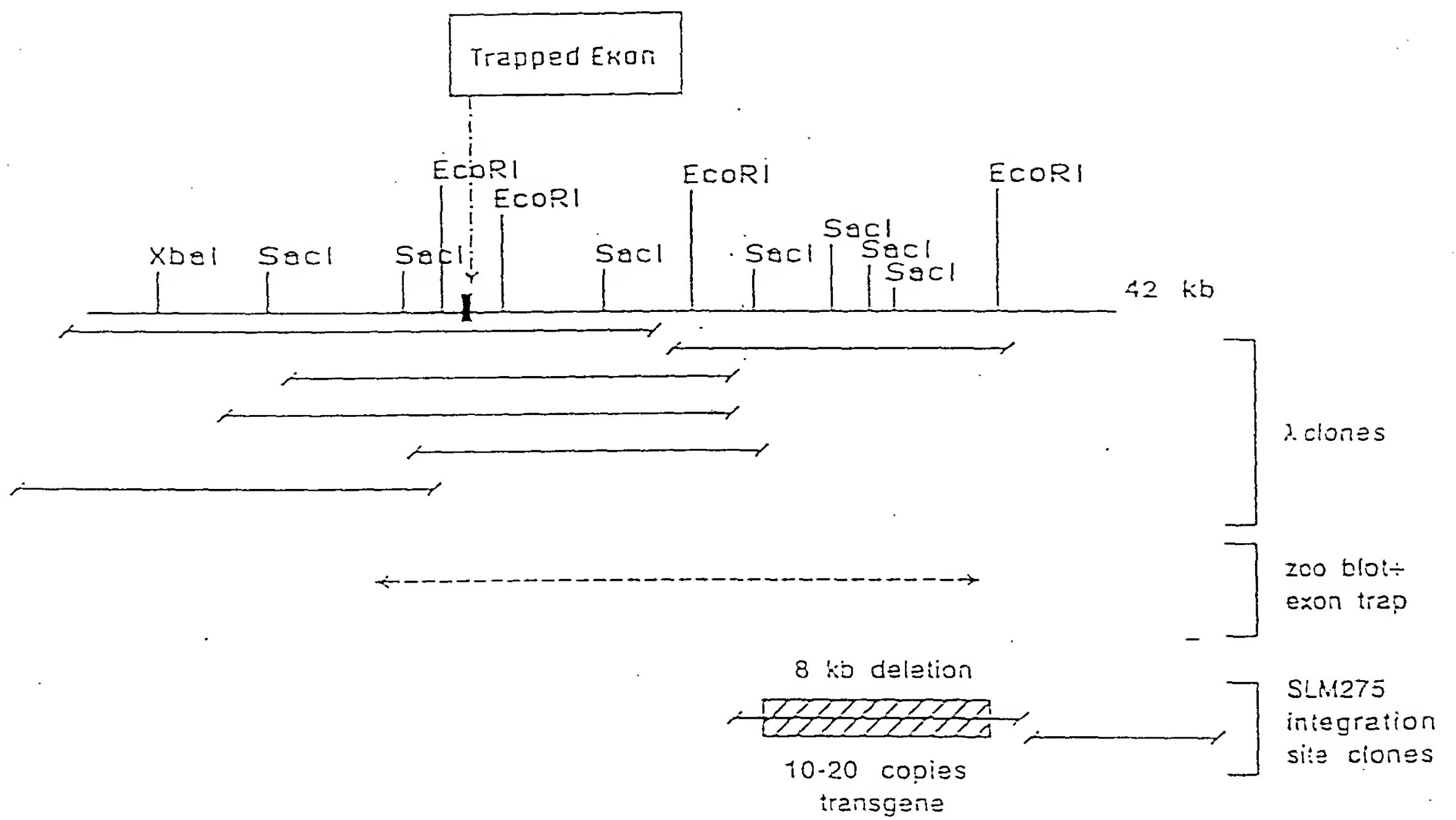


8907-034 (Sheet 1 of 32)

Figure 1



1860	1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268</
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	--------

[illegible]

FIRI	LPL-
VVRV	LPL-
FIRV	LXK-
---	---
---	---
TALF	RQWY
FIRI	IP--
STAI	HOLT
FIR.	P..

Figure 3A

10	20	30	40	50	60	
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	
EcoRI	HpaI					
▼	▼					
GAATTC	CGGT	TAACTG	AGGA	CAAAGG	GTAA	TGCAGAAGTG ATATTGATT TCCATTCTCA 60
		DraI				
		▼				
TTCCCA	GTGG	CCTTGATATT TAAACTGATT CCTGCCACCA GGTCCTTGGG CCACCCTGTC 120				
	Esp3I	SphI				
	▼	▼				
CCTGCGTCTC	ATATTCTGC	ATGCTGCTTT	GTTTGTATAT	AGTCCGCTCC	TGGCCTCAGG	180
CTCGCTCCCC	TCCAGCTCTC	GCTTCATTGT	TCTCCAAGTC	AGAAGCCCCC	GCATCCGCCG	240
			BssHII			
			▼			
CGCAGCAGCG	TGAGCCGTAG	TCACTGCTGG	CCGCTTCGCC	TGCGTGCGCG	CACGGAAATC	300
GGGGAGCCAG	GAACCCAAGG	AGCCGCCGTC	CGCCCGCTGT	GCCTCTGCTA	GACCACTCGC	360
AGCCCCAGCC	TCTCTCAAGC	GCACCCACCT	CCGCGCACCC	CAGCTCAGGC	GAAGCTGGAG	420
TGAGGGTGAA	TCACCCCTTTC	TCTAGGGSCA	CCACTCTTTT	ATCGCCCTTC	CCAAGATTTC	480

8907-034 (Sheet 4 of 32)

Figure 3B

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

Eco47III AatII

AGAAGCGCTG CGGGAGGAAA GACGTCCTCT TGATCTCTGA CAGGCGGGG TTTACTGCTG 540

BssHII PstI

TCCTGCAGGC GCGCCTCGCC TACTGTGCC TCCGCTACGA CCCCAGGACCA GCCCAGGTCA 600

BspHI

CGTCCGTGAG AAGGGATCAT GAAGCACTTG GTAGCAGCCT GGCTTTTGGT TGGACTCAGC 660

M K N L V A A W L L V G L S

CTCGGGGTGC CCCAGTTCCG CAAAGGTGAC ATTTGCAACC CGAAGCCCTG TGAAAATGGT 720

L G V P Q F G K G D I C N P N P C E N G

BspMI

GGCATCTGTC TGTCAGGACT GGCTGATGAT TCCTTTTCCT GTGAGTGTCC AGAAGGCTTC 780

G I C L S G L A D D S F S C E C P E G F -

BspMI

GCAGGTCCGA ACTGCTCTAG TGTTGTGGAG GTTGCATCAG ATGAGAAAA GCCTACTTCA 840

A G P N C S S V V E V A S D E E K P T S

GCAGGTCCCT GCATCCCTAA CCCATGCCAT AACGGAGGAA CCTGTGAGAT AAGCGAAGCC 900

A G P C I P N P C H N G G T C E I S E A

TATCGAGGAG ACACATTCAT AGGCTATGTT TGTAATGTC CTCGGGGATT TAATGGGATT 960

Y R G D T F I G Y V C K C P R G F N G I

8907-034 (sheet 5 of 32)

Figure 3c

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

CACTGTCAGC ACAATATAAA TGAATGTGAA GCTGAGCCTT GCAGAAATGG CGGAATATGT 1020
H C Q H N I N E C E A E P C R N G G I C

BsmI
ACCGACCTTG TTGCTAACTA CTCTTGTGAA TGCCCAGGAG AATTTATGGG ACGAAATTGT 1080
T D L V A N Y S C E C P G E F M G R N C

CAATATAAAT GCTCTGGCCA CTTGGGAATC GAAGGTGGGA TCATATCTAA TCAGCAAATC 1140
Q Y K C S G H L G I E G G I I S N Q Q I

SacI
Ecl136II
ACAGCTTCAT CTAATCACCG AGCTCTTTT GGA CTCCAGA AGTGSTATCC CTACTATGCT 1200
T A S S N H R A L F G L Q K W Y P Y Y A

NcoI
MscI
BamI
PvuII
CGACTTAATA AGAAGGGCCT TATAAATGCC TGGACAGCTG CTGAAATGA CAGATGGCCA 1260
R L N K K G L I N A W T A A E N D R W P

TGGATTCAGA TAAATTTGCA AAGAAATG AGAGTCACTG GTGTTATTAC CCAAGGAGCA 1320
W I Q I N L Q R K M R V T G V I T Q G A

AAAAGGATTG GAAGCCCAGA GTACATAAAA TCCTACAAA TTGCCTACAG CAATGACGGG 1380
K R I G S P E Y I K S Y K I A Y S N D G

BbsI
BsrI
AAGACCTGGG CAATGTACAA AGTAAAAGGC ACCAATGAAG AGATGGTCTT TCGTGGAAAT 1440
K T W A M Y K V K G T N E E M V F R G N

8907-034 (sheet 5 of 32)

Figure 3D

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

NdeI

GTTGATAACA ACACACCATA TGCTAATTCT TTCACACCCC CAATCAAAGC TCAGTATGTA 1500
V D N N T P Y A N S F T P P I K A Q Y V

AGACTCTACC CCCAAATTG TCGAAGGCAT TGTACTTTAA GAATGGAACT TCTTGGCTGT 1550
R L Y P Q I C R R H C T L R M E L L G C

SacI
Ecl1135II

GAGCTCTCAG GCTGTTTCAGA ACCTTTGGGG ATGAAATCAG GGCATATACA AGACTACCAG 1620
E L S G C S E P L G M K S G H I Q D Y Q

BbsI

ATCACTGCCT CCAGCGTCTT CAGAACACTC AACATGGACA TGTTTACTTG GGAACCAAGG 1680
I T A S S V F R T L N M D M F T W E P R

AAAGCCAGGC TGGACAAGCA AGGCAAAGTA AATGCCTGGA CTCCCGGCCA TAACGACCAG 1740
K A R L D K Q G K V N A W T S G H N D Q

TCACAATGGT TACAGGTTGA TCTTCTTGTC CCTACTAAGG TGACAGGCAT CATTACACAA 1800
S Q W L Q V D L L V P T K V T G I I T Q

PmlI

GGAGCTAAG ATTTTGGTCA CGTGCASTTT GTTGGGTCAT ACAACTAGC TTACAGCAAT 1860
G A K D F G H V Q F V G S Y K L A Y S N

ApaLI

GATGGAGAAC ACTGGATGGT GCACCAGGAT GAAAPACAGA GGAAGACAA GGTTTTTCAA 1920
D G E H W M V H Q D E K Q R K D K V F Q

8907-034 (Sheet 7 of 32)

Figure 3E

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

GGCAATTTTG ACAATGACAC TCACAGGAAA AATGTCATCG ACCCTCCCAT CTATGCACGA 1980
G N F D N D T H R K N V I D P P I Y A R

TTCATAAGAA TCCTTCCTTG GTCCTGGTAT GGAAGGATCA CTCTGCGGTC AGAGCTGCTG 2040
F I R I L P W S W Y G R I T L R S E L L

FspI

GGCTGCGCAG AGGAGGAATG AAGTCCGGGG CCGCACATCC CACAATGCTT TTCTTTATTT 2100
G C A E E E

TCCTATAAGT ATCTCCACGA AATGAAGTGT GTGAAGCTGA TGGAAACTGC ATTTGTTTTT 2160

HindIII

TTCAAAGTGT TCAAATTATG GTAGGCTACT GACTGTCTTT TTAGGAGTTC TAAGCTTGCC 2220

TTTTTAATAA TTTAATTGG TTTCCTTTGC TCAACTCTCT TATGTAATAT CACACTGTCT 2280

EcoRI

GTGAGTTACT CTTCTTGTTT TCT 2303

8907-034 (Sheet 3 of 32)

Figure 4A

5'	TCT	CTT	9 TAG	TCA	CCA	18 CTC	TCG	CCC	27 TCT	CCA	AGA	36 ATT	TGT	TTA	45 ACA	AAG	CGC	54 TGA
	S	L	*	S	P	L	S	P	S	P	R	I	C	L	T	K	R	*
	GGA	AAG	63 AGA	ACG	TCT	72 TCT	TGA	ATT	81 CTT	TAG	TAG	90 GGG	CGG	AGT	99 CTG	CTG	CTG	108 CCC
	G	K	R	T	S	S	*	I	L	*	*	G	R	S	L	L	L	P
	TGC	GCT	117 GCC	ACC	TCG	126 GCT	ACA	CTG	135 CCC	TCC	GCG	144 ACG	ACC	CCT	153 GAC	CAG	CCG	162 GGG
	C	A	A	T	S	A	T	L	P	S	A	T	T	P	D	Q	P	G
	TCA	CCT	171 CCG	GGA	GAC	180 GGG	ATC	ATG	189 AAG	CGC	TCG	198 GTA	CCC	GTC	207 TGG	CTC	TTG	216 GTC
	S	R	P	G	D	G	I	M	K	R	S	V	A	V	W	L	L	V
	GGG	CTC	225 AGC	CTC	GGT	234 GTC	CCC	CAG	243 TTC	GGC	AAA	252 GGT	GAT	ATT	261 TGT	GAT	CCC	270 AAT
	G	L	S	L	G	V	P	Q	F	G	K	G	D	I	C	D	P	N
	CCA	TGT	279 GAA	AAT	GGA	288 GGT	ATC	TGT	297 TTG	CCA	GGA	306 TTG	GCT	GTA	315 GGT	TCC	TTT	324 TCC
	P	C	E	N	G	G	I	C	L	P	G	L	A	V	G	S	F	S
	TGT	GAG	333 TGT	CCA	GAT	342 GGC	TTC	ACA	351 GAC	CCC	AAC	360 TGT	TCT	AGT	369 GTT	GTC	GAG	378 GTT
	C	E	C	P	D	G	F	T	D	P	N	C	S	S	V	V	E	V
	GCA	TCA	387 GAT	GAA	GAA	396 GAA	CCA	ACT	405 TCA	GCA	GGT	414 CCC	TGC	ACT	423 CCT	AAT	CCA	432 TGC
	A	S	D	E	E	E	P	T	S	A	G	P	C	T	P	N	P	C
	CAT	AAT	441 GGA	GGA	ACC	450 TGT	GAA	ATA	459 AGT	GAA	GCA	468 TAC	CGA	GGG	477 GAT	ACA	TTG	486 ATA
	H	N	G	G	T	C	E	I	S	E	A	Y	R	G	D	T	F	I
	GGC	TAT	495 GTT	TGT	AAA	504 TGT	CCC	CGA	513 GGA	TTT	AAT	522 GGG	ATT	CAC	531 TGT	CAG	CAC	540 AAC
	G	Y	V	C	K	C	P	R	G	F	N	G	I	H	C	Q	H	N
	ATA	AAT	549 GAA	TGC	GAA	558 GTT	GAG	CCT	567 TGC	AAA	AAT	576 GGT	GGA	ATA	585 TGT	ACA	GAT	594 CTT
	I	N	E	C	E	V	E	P	C	K	N	G	G	I	C	T	D	L
	GTT	GCT	603 AAC	TAT	TCC	612 TGT	GAG	TGC	621 CCA	GGC	GAA	630 TTT	ATG	GGA	639 AGA	AAT	TGT	648 CAA
	V	A	N	Y	S	C	E	C	P	G	E	F	M	G	R	N	C	Q

8907-034 (Sheet 9 of 32)

Figure 4B

TAC	AAA	657	TCA	GGC	656	CTG	GGA	ATT	GAA	GGT	634	ATT	ATA	693	TCA	AAC	CAG	702	CAA	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Y	K	C	S	G	P	L	G	I	E	G	G	I	I	S	N	Q	Q			
ATC	ACA	711	TCC	TCT	720	CAC	CGA	GCT	CTT	TTT	732	GGA	CTC	CAA	747	AAA	TGG	TAT	756	CCC
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
I	T	A	S	S	T	H	R	A	L	F	G	L	Q	K	W	Y	P			
TAC	TAT	765	GCA	CGT	CTT	AAT	AAG	AAG	GGG	CTT	ATA	AAT	GCG	TGG	801	ACA	GCT	CCA	810	GAA
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Y	Y	A	R	L	N	K	K	G	L	I	N	A	W	T	A	A	E			
AAT	GAC	819	AGA	TGG	AAC	CGG	TGG	ATT	CAG	ATA	AAT	TTG	CAA	AGA	855	AAA	ATG	AGA	864	GTT
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
N	D	R	W	N	R	W	I	Q	I	N	L	Q	R	K	M	R	V			
ACT	GGT	873	GTG	ATT	ACC	CAA	GGG	GCC	AAG	AGG	ATT	GGA	AGC	CCA	909	GAG	TAT	ATA	918	AAA
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
T	G	V	I	T	Q	G	A	K	R	I	G	S	P	E	Y	I	K			
TTC	TAC	927	AAA	ATT	GCC	TAC	AGT	AAT	GAT	GGA	AAG	ACT	TGG	GCA	953	ATG	TAC	AAA	972	GTC
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
F	Y	K	I	A	Y	S	N	D	G	K	T	W	A	M	Y	K	V			
AAA	GGC	981	ACC	AAT	GAA	GAC	ATG	GTG	TTT	CGT	GGA	AAC	ATT	GAT	1017	AAC	AAC	ACT	1026	CCA
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
K	G	T	N	E	D	M	V	F	R	G	N	I	D	N	N	T	P			
TAT	GCT	1035	AAC	TCT	TTC	ACA	CCC	CCC	ATA	AAA	GCT	CAG	TAT	GTA	1071	AGA	CTC	TAT	1080	CCG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Y	A	N	S	F	T	P	P	I	K	A	Q	Y	V	R	L	Y	P			
CAA	GTT	1089	TGT	CGA	AGA	CAT	TGC	ACT	TTG	CGA	ATG	GAA	CTT	CTT	1125	GGC	TGT	GAA	1134	CTG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Q	V	C	R	R	H	C	T	L	R	M	E	L	L	G	C	E	L			
TCC	GGT	1143	TGT	TCT	GAG	CCT	CTG	GGT	ATG	AAA	TCA	GGA	CAT	ATA	1179	CAA	GAC	TAT	1188	CAG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
S	G	C	S	E	P	L	G	M	K	S	G	H	I	Q	D	Y	Q			
ATC	ACT	1197	GCC	TCC	AGC	ATC	TTC	AGA	ACG	CTC	AAC	ATG	GAC	ATG	1233	TTC	ACT	TGG	1242	GAA
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
I	T	A	S	S	I	F	R	T	L	N	M	D	M	F	T	W	E			
CCA	AGG	1251	AAA	GCT	CGG	CTC	GAC	AAG	CAA	GGC	AAA	GTG	AAT	GCC	1287	TGG	ACC	TCT	1296	GGC
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
P	R	K	A	R	L	D	K	Q	G	K	V	N	A	W	T	S	G			
CAC	AAT	1305	GAC	CAG	TCA	CAA	TGG	TTA	CAG	GTG	GAT	CTT	CTT	GTT	1341	CCA	ACC	AAA	1350	GTG
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
H	N	D	O	S	Q	W	L	Q	V	D	L	L	V	P	T	K	V			

8907-034 (Sheet 10 of 32)

Figure 4c

1359	1368	1377	1386	1395	1404
ACT GGC ATC ATT ACA CAA GCA GCT AAA GAT TTT GGT CAT GTA CAG TTT GTT GGC					
T G I I T Q G A K D F G H V Q F V G					
1413	1422	1431	1440	1449	1458
TCC TAC AAA CTG GCT TAC AGC AAT GAT GGA GAA CAC TGG ACT GTA TAC CAG GAT					
S Y K L A Y S N D G E H W T V Y Q D					
1467	1476	1485	1494	1503	1512
GAA AAG CAA AGA AAA GAT AAG GTT TTC CAG GGA AAT TTT GAC AAT GAC ACT CAC					
E K Q R K D K V F Q G N F D N D T H					
1521	1530	1539	1548	1557	1566
AGA AAA AAT GTC ATC GAC CCT CCC ATC TAT GCA CGA CAC ATA AGA ATC CTT CCT					
R K N V I D P P I Y A R H I R I L P					
1575	1584	1593	1602	1611	1620
TGG TCC TGG TAC GGG AGG ATC ACA TTG GCG TCA GAG CTG CTG GGC TGC ACA GAG					
W S W Y G R I T L A S E L L G C T E					
1629	1638	1647	1656	1665	1674
GAG GAA TGA GGG GAG GCT ACA TTT CAC AAC CGT CTT CCC TAT TTG GGT AAA AGT					
E E * G E A T F H N R L P Y L G K S					
1683	1692	1701	1710	1719	1728
ATC TCC ATG GAA TGA ACT GTG TAA AAT CTG TAG GAA ACT GAA TGG TTT TTT TTT					
I S M E * T V * N L * E T E W F F F					
1737	1746	1755	1764	1773	
TTT TCA TGA AAA AGT GGT CAA ATT ATG GTA GGC AAC TAA CGG TGT TTT TAC C 3'					
F S * K S G Q I M V G N * R C F Y					

Figure 5

10	20	30	40	50	60
GACAGATGCC	CATGGATTCA	GATAAATTTG	CAAGAAAA	TGAGATCAC	TGGTGTATT
70	80	90	100	110	120
ACCCAAGGAG	CAAAAAGGAT	TGGAAGCCCA	GAGTACATA	AATCCTACAA	AATTGCCTAC
130	140	150	160	170	180
AGCAATGACG	CGAAGACCTG	GGCAATGTAC	AAAGTAAAG	GCACCAATGA	AGAGATGGTC
190	200	210	220	230	240
TTTCGTGGAA	ATGTTGATAA	CAACACACCA	TATGCTAATT	CTTTCACACC	CCCAATCAAA
250	260	270	280	290	300
GCTCAGTATG	TAAGACTCTA	CCCCCAATT	TGTCGAAGGC	ATTGTACTTT	AAGAATGGAA
310	320	330	340	350	360
CTTCTTGGCT	GTGAGCTC..

NAME	RESIDENCE	DATE	REMARKS
Mr. J. H. Smith	123 Main St., N.Y.	10/15/1911	Received \$100.00
Mr. W. B. Jones	456 Broadway, N.Y.	10/16/1911	Received \$50.00
Mr. C. D. Brown	789 Third Ave., N.Y.	10/17/1911	Received \$25.00
Mr. E. F. White	101 West 125th St., N.Y.	10/18/1911	Received \$75.00
Mr. G. H. Black	234 Fifth Ave., N.Y.	10/19/1911	Received \$150.00
Mr. I. J. Green	567 Sixth Ave., N.Y.	10/20/1911	Received \$30.00
Mr. K. L. Hall	890 Seventh Ave., N.Y.	10/21/1911	Received \$120.00
Mr. M. N. King	1122 Eighth Ave., N.Y.	10/22/1911	Received \$40.00
Mr. O. P. Lee	1444 Ninth Ave., N.Y.	10/23/1911	Received \$60.00
Mr. Q. R. Scott	1777 Tenth Ave., N.Y.	10/24/1911	Received \$80.00
Mr. S. T. Walker	2000 Eleventh Ave., N.Y.	10/25/1911	Received \$10.00
Mr. U. V. Young	2333 Twelfth Ave., N.Y.	10/26/1911	Received \$90.00
Mr. W. X. Zane	2666 Thirteenth Ave., N.Y.	10/27/1911	Received \$110.00
Mr. Y. Z. Baker	2999 Fourteenth Ave., N.Y.	10/28/1911	Received \$130.00
Mr. A. B. Carter	3333 Fifteenth Ave., N.Y.	10/29/1911	Received \$140.00
Mr. C. D. Evans	3666 Sixteenth Ave., N.Y.	10/30/1911	Received \$150.00
Mr. E. F. Gibson	4000 Seventeenth Ave., N.Y.	10/31/1911	Received \$160.00
Mr. G. H. Harris	4333 Eighteenth Ave., N.Y.	11/1/1911	Received \$170.00
Mr. I. J. King	4666 Nineteenth Ave., N.Y.	11/2/1911	Received \$180.00
Mr. K. L. Lee	5000 Twentieth Ave., N.Y.	11/3/1911	Received \$190.00
Mr. M. N. Scott	5333 Twenty-first Ave., N.Y.	11/4/1911	Received \$200.00
Mr. O. P. Walker	5666 Twenty-second Ave., N.Y.	11/5/1911	Received \$210.00
Mr. Q. R. Young	6000 Twenty-third Ave., N.Y.	11/6/1911	Received \$220.00
Mr. S. T. Zane	6333 Twenty-fourth Ave., N.Y.	11/7/1911	Received \$230.00
Mr. U. V. Baker	6666 Twenty-fifth Ave., N.Y.	11/8/1911	Received \$240.00
Mr. W. X. Carter	7000 Twenty-sixth Ave., N.Y.	11/9/1911	Received \$250.00
Mr. Y. Z. Evans	7333 Twenty-seventh Ave., N.Y.	11/10/1911	Received \$260.00
Mr. A. B. Gibson	7666 Twenty-eighth Ave., N.Y.	11/11/1911	Received \$270.00
Mr. C. D. Harris	8000 Twenty-ninth Ave., N.Y.	11/12/1911	Received \$280.00
Mr. E. F. King	8333 Thirtieth Ave., N.Y.	11/13/1911	Received \$290.00
Mr. G. H. Lee	8666 Thirty-first Ave., N.Y.	11/14/1911	Received \$300.00
Mr. I. J. Scott	9000 Thirty-second Ave., N.Y.	11/15/1911	Received \$310.00
Mr. K. L. Walker	9333 Thirty-third Ave., N.Y.	11/16/1911	Received \$320.00
Mr. M. N. Young	9666 Thirty-fourth Ave., N.Y.	11/17/1911	Received \$330.00
Mr. O. P. Zane	10000 Thirty-fifth Ave., N.Y.	11/18/1911	Received \$340.00
Mr. Q. R. Baker	10333 Thirty-sixth Ave., N.Y.	11/19/1911	Received \$350.00
Mr. S. T. Carter	10666 Thirty-seventh Ave., N.Y.	11/20/1911	Received \$360.00
Mr. U. V. Evans	11000 Thirty-eighth Ave., N.Y.	11/21/1911	Received \$370.00
Mr. W. X. Gibson	11333 Thirty-ninth Ave., N.Y.	11/22/1911	Received \$380.00
Mr. Y. Z. Harris	11666 Fortieth Ave., N.Y.	11/23/1911	Received \$390.00
Mr. A. B. King	12000 Forty-first Ave., N.Y.	11/24/1911	Received \$400.00
Mr. C. D. Lee	12333 Forty-second Ave., N.Y.	11/25/1911	Received \$410.00
Mr. E. F. Scott	12666 Forty-third Ave., N.Y.	11/26/1911	Received \$420.00
Mr. G. H. Walker	13000 Forty-fourth Ave., N.Y.	11/27/1911	Received \$430.00
Mr. I. J. Young	13333 Forty-fifth Ave., N.Y.	11/28/1911	Received \$440.00
Mr. K. L. Zane	13666 Forty-sixth Ave., N.Y.	11/29/1911	Received \$450.00
Mr. M. N. Baker	14000 Forty-seventh Ave., N.Y.	11/30/1911	Received \$460.00
Mr. O. P. Carter	14333 Forty-eighth Ave., N.Y.	11/31/1911	Received \$470.00
Mr. Q. R. Evans	14666 Forty-ninth Ave., N.Y.	12/1/1911	Received \$480.00
Mr. S. T. Gibson	15000 Fiftieth Ave., N.Y.	12/2/1911	Received \$490.00
Mr. U. V. Harris	15333 Fifty-first Ave., N.Y.	12/3/1911	Received \$500.00
Mr. W. X. King	15666 Fifty-second Ave., N.Y.	12/4/1911	Received \$510.00
Mr. Y. Z. Lee	16000 Fifty-third Ave., N.Y.	12/5/1911	Received \$520.00
Mr. A. B. Scott	16333 Fifty-fourth Ave., N.Y.	12/6/1911	Received \$530.00
Mr. C. D. Walker	16666 Fifty-fifth Ave., N.Y.	12/7/1911	Received \$540.00
Mr. E. F. Young	17000 Fifty-sixth Ave., N.Y.	12/8/1911	Received \$550.00
Mr. G. H. Zane	17333 Fifty-seventh Ave., N.Y.	12/9/1911	Received \$560.00
Mr. I. J. Baker	17666 Fifty-eighth Ave., N.Y.	12/10/1911	Received \$570.00
Mr. K. L. Carter	18000 Fifty-ninth Ave., N.Y.	12/11/1911	Received \$580.00
Mr. M. N. Evans	18333 Sixtieth Ave., N.Y.	12/12/1911	Received \$590.00
Mr. O. P. Gibson	18666 Sixty-first Ave., N.Y.	12/13/1911	Received \$600.

Figure 6

m-del-1	MKHLVAAWLLVGLSLGVPQFGKQ	agf-1	50
h-del-1	RS V D P VG		
m-del-1	PEGFAGPNCSSVVEVASDEEEKPTSAGPCIPNPCHNGGTCEISEA	agf-2	100
h-del-1	D TD E T		
m-del-1	IGYVCKCPRGFNGIHCQHINECEAPCPNNGGICTDLVANYSCCECPGEFM	agf-3	150
h-del-1	V K		
m-del-1	GRNCQYKCSGHLGIEGGIISNQGITASSNHRALFGLQKWYPYARLNKKG		200
h-del-1	P T		
m-del-1	LINAWTAPENDRWP-WIQENLQKQGVITQGA	discoidin-1	249
h-del-1	NR +VTVG = "minor" F		250
m-del-1	YSNDGKTWAMYKVKGTNEEMVFRGNVDNNTPYANSFTPPIKAQYVRLYPQ		299
h-del-1	D I		300
m-del-1	ICRRHCTLRVLLGCELSGCSEPLGKSGHIQDYQITASSVFRTLNDMF		349
h-del-1	V I		350
m-del-1	TWEPRKARLDKQGKVNAWTSGHNDQSQWLQVDLLVPTKVTGIIITQGAKDF		399
h-del-1	X X		400
m-del-1	GHVQFVGSYKLAYSNDGEHVMVHQDEKQRKDKVFEQGNFDNDTHPKNVIDP		449
h-del-1	T X X		450
m-del-1	PIYARFIRILPWSWYGRITLRSELLGCAEEE		430
h-del-1	H A T		481

PROTEIN DOMAINS OF HUMAN DEL-1

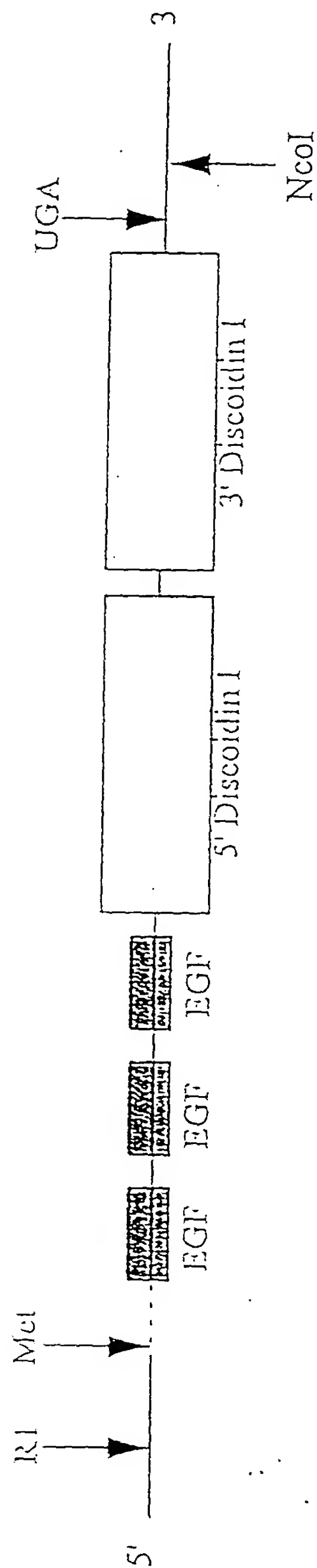


Figure 8

```

1      10      20      30      40      50      60      70
N- CSTQLGMEGGALADSQISASYVINGFNGLQKRWGPPELARLYPTGTVAWHA-SNYD-SKPWTQVALLRQYEW
**   **   *** *   **   **   *** * *   *** *   *** *   *** *   ****
N- CSGPLGETGGIISNQQTASSTHPALFGLOKWTPPYAPLNKRGGLINAWTAENDRGARWITQINLQPKYEW
1      10      20      30      40      50      60      70

71     80     90    100    110    120    130    140
SGVMTQGASPRAGRAEYLATEFKVAYSIDG-RPFETIQDESGGDREFLGILLNSLVAMFNPTLEAQYTRL
**   ***** * *   ** * *   *** **   *   *   *** *   *   *   *** **
TGVTITQGAKRIGSPEYIKFYRIAYSDGNIVAMKRVGTHNEIMVFRRNTDENTFYANSETPPILRAQYVRL
71     80     90    100    110    120    130    140

141    150    160    170    180    190    200    210
YFVSCHPGCTLRFFELLGCCELHGCLPPLGLAONTIPDSQMSASSSYATYNLPAGWYPHLGRLENQGNIA
**   * *   ***** ***** **   ***** *   *   *   ***   * *   *   *   *   *** *****
YPQVTCPRHCTLRMELLGCCELSGCCSEPLGMKSCHIQQDYQITASSIFRTLAQDTFTWEPRRAPLDKQGNVAG
141    150    160    170    180    190    200    210

211    220    230    240    250    260    270    280
WTAQSNSAREWLQVDLGTQRQVTGITITQGAPDFGHIOYVESYRVVHSDDGVQNTVY--EDQGSSSNVFCQN
**   *   ***** ***** ***** * *   *** *   *   *   *** *   *   *   *****
WTSGEINDQSQWLQVALLVPTRVTGIIITQGANDKGHVQFVGSYRLAYSNDGEHWTVXQDENQRQKDXVXQGN
211    220    230    240    250    260    270    280

281    290    300    310    320
LNNSTFGNTEFRPFMARYVRVLFSWHNPITLRLELLGC* -C
**   *   **   *   **   *   *   *   *   *   *   *   *   *   *   *   *
FENDTHPRGVVIDPPITYARHIRILPWISWYGRITLASSELLGOT -C
281    290    300    310    320

```

8907-034 (Sheet 15 of 32)

Figure 9

PUTATIVE SIGNAL SEQUENCE OF HUMAN DEL-1

MKRSVAVWLLVGLSLGVPOFGKGDI...

8907-034 (sheet 16 of 32)

Figure 10

EGF-like Domains of hu Del-1

1)	CDPNPCENGGICLPGLAVG-----SFSCECPDGFTDPNCS	SVVEVASDEEEPTSAGP
2)	CTPNPCENGGTCEISEAYRGDFFIGYVCKCPRGFNGIHCO	FNINE
3)	CEVEPCENGGICTDLVA-----NYSCECPGEFMGRNCQ	YK
CONSENSUS	C---PC-NGG-C-----Y-C-C--GY-G--C-	
EGF DOMAIN		F F

8907-034 (Sheet 17 of 32)

Figure 11

5'	-GT	GAT	ATT	TGT	GAT	CCC	AAT	CCA	TGT	GAA	AAT	GGA	GGT	ATC	TGT	TTG	CCA	GGA	5'
	X	D	I	C	D	P	N	P	C	E	N	G	G	I	C	L	P	G	
	TTG	GCT	GTA	GGT	TCC	TTT	TCC	TGT	GAG	TGT	CCA	GAT	GGC	TTC	ACA	GAC	CCC	AAC	
	L	A	V	G	S	F	S	C	E	C	P	D	G	F	T	D	P	N	
	TGT	TCT	AGT	GTT	GTG	GAG	GTT	GGT	CCC	TGC	ACT	CCT	AAT	CCA	TGC	CAT	AAT	GGA	
	C	S	S	V	V	E	V	G	P	C	T	P	N	P	C	H	N	G	
	GGA	ACC	TGT	GAA	ATA	AGT	GAA	CCA	TAC	CGA	GGG	GAT	ACA	TTC	ATA	GGC	TAT	GTT	
	G	T	C	E	I	S	E	A	Y	R	G	D	T	F	I	G	Y	V	
	TGT	AAA	TGT	CCC	CGA	GGA	TTT	AAT	GGG	AAT	CAC	TGT	CAG	CAC	AAC	ATA	AAT	GAA	
	C	K	C	P	R	G	F	N	G	I	H	C	Q	H	N	I	N	E	
	TGC	GAA	GTT	GAG	CCT	TGC	AAA	AAT	GGT	GGA	ATA	TGT	ACA	G	3'				
	C	E	V	E	P	C	K	N	G	G	I	C	T						

Figure 12A

AatII
PstI
▼
▼
GCGGGAGGAA AGACGTCCTC TTGATCTCTG ACAGGGCGGG GTTTACTGCT GTCCTGCAGG 480

8907-034 (Sheet 19 of 32)

Figure 12B

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

CGCGCCTCGC CTACTGTGCC CTCCGCTACG ACCCCGGACC AGCCCAGGTC ACGTCCGTGA 540

BspHI

GAAGGGATCA TGAAGCACTT GGTAGCAGCC TGGCTTTTGG TTGGACTCAG CCTCGGGGTG 500
M K H L V A A W L L V G L S L G V

CCCCAGTTCG GCAAAGGTGA CATTTCGAAC CCGAACCCT GTGAAATGG TGGCATCTGT 550
P Q F G K G D I C N P N P C E N G G I C

BspMI

CTGTCAGGAC TGGCTGATGA TTCCTTTTCC TGTGAGTGTC CAGAGGCTT CGCAGGTCCG 720
L S G L A D D S F S C E C P E G F A G P

BspMI

AACTGCTCTA GTGTTGTGGA GGTTCATCA GATGAAGAAA AGCCTACTTC AGCAGGTCCC 750
N C S S V V E V A S D E E K P T S A G P

TGCATCCCTA ACCCATGCCA TAACGGAGGA ACCTGTGAGA TAAGCGAAGC CTATCGAGGA - 840
C I P N P C H N G G T C E I S E A Y R G

GACACATTCA TAGGCTATGT TTGTAATGT CCTCGGGGAT TTAATGGGAT TCACTGTCAG 900
D T F I G Y V C K C P R G F N G I H C Q

CACAATATAA ATGAATGTGA ACCTGAGCCT TGCAGAAATG GCGGAATATG TATCGACCTT 950
H N I N E C E A E P C R N G G I C T D L

8907-034 (sheet 20 of 32)

Figure 12C

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

BsmI

GTTGCTAACT ACTCTTGTGA ATGCCCAGGA GAATTTATGG GACGAAATTG TCAATATAAA 1020
V A N Y S C E C P G E F M G R N C Q Y K

TGCTCTGGGC ACTTGGGAAT CGAAGGTGGG ATCATATCTA ATCAGCAAAT CACAGCTTCA 1080
C S G H L G I E G G I I S N Q Q I T A S

SacI
Ecl1136II

TCTAATCACC GAGCTCTTTT TGGACTCCAG AAGTGGTATC CCTACTATGC TAGACTTAAT 1140
S N H R A L F G L Q K W Y P Y Y A R L N

NcoI
MscI
BclI

PvuII

AAGAAGGGCC TTATAAATGC CTGGACAGCT GCTGAAATG ACAGATGGCC ATGGATTTCAG 1200
K K G L I N A W T A A E N D R W P W I Q

GTAACAGTGG GATGAGACAA ATCCATTTCC CAAATTATCA GAATCATTAT AGAAGTAGGT 1260
V T V G

TAGGGAGAAT TGGCTGTGAT TCTTTCTCAT GGTAAATG TGATTTAGTT CAGAATTAAC - 1320

ATGGTTGGAA ACTCTAFAAA ATGTGGAAAA CAGGAACATT CTATGTCTGA AAATCTGAAA 1380

ATAGCATCAA GATGAAAACA TTCTTTAGTC ATAAATATAC TCTTTTAAGT TATAGTAGAC 1440

8907-034 (sheet 21 of 32)

Figure 12D

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

BglII

AAAAGATCT TATCATTTC TAAGTGGACT TTTGGGATAG CATTGGAAT GTAAATGAAA 1500

SspI

TAAATACCTA ATTGAAAAA GTTTATTCTA AAGTGTTAAT ATTTAGCAAC AGATTCAGAG 1560

ACAGAAAGT AACATTCAA TCTGTGTATT TTTGTGAGA AATAGTTTCC CATGTGCAA 1520

FspI

BspHI

PstI

TATAAAGTGC GCATCATATC ATGATAATAT CCAACTGTCT GCAGAACTCC CTTTCATAAA 1580

TGAGAGAATT TTAATTCATA GTGCCTTATA TCCTCATCAG CCATCTGACT TTACTACAGA 1740

NsiI

AGAAAACAAT GAAATGATGC ATTAAGTGCT TTGCTAGAAG AACATCATA GCAAGCTGA - 1800

XhoI

HindIII

PaeR7I

TAGCCACAT TCTGTGCANN NAAGCTTCCA GAGCACTCGA GAAAGCAG AATGAGATG 1860

BclI

TTTTATGAA ACCGAAAAGA TAATCTGATT TCTGTGAAAT AACTTTTGA TCACTGTGTT 1920

89-7-034 (sheet 22 of 32)
Figure 12E

10	20	30	40	50	60
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890

CTTTAAGATA GTCACATAACA AGTCATTAGT AGCAGATACC AAATGGGAGA AAATTTCCAG 1980

Bst1107I

▼TATACTGAGG GTCAAGGCAG TCATGCTGAA ACTACATGAG GTCAGGAAAG TTTTGAAATA 2040

AGGTGATTTT GGAAGGATAC CTTCAACTGG CCTAGATTTT CAAGAAACAG TGTAATCAAC 2100

AGCCAAACAT GAGAATCTAG CTAACAGCAT TTAGAAACC AGAACTAAGA GTGTTACTGG 2160

DraI

GGAATTGCAT ▼TTAAATCCAG TATGAGAGTT TGCAAATGCC GTATTCTTCT AAGGGGTTTG 2220

NcoI

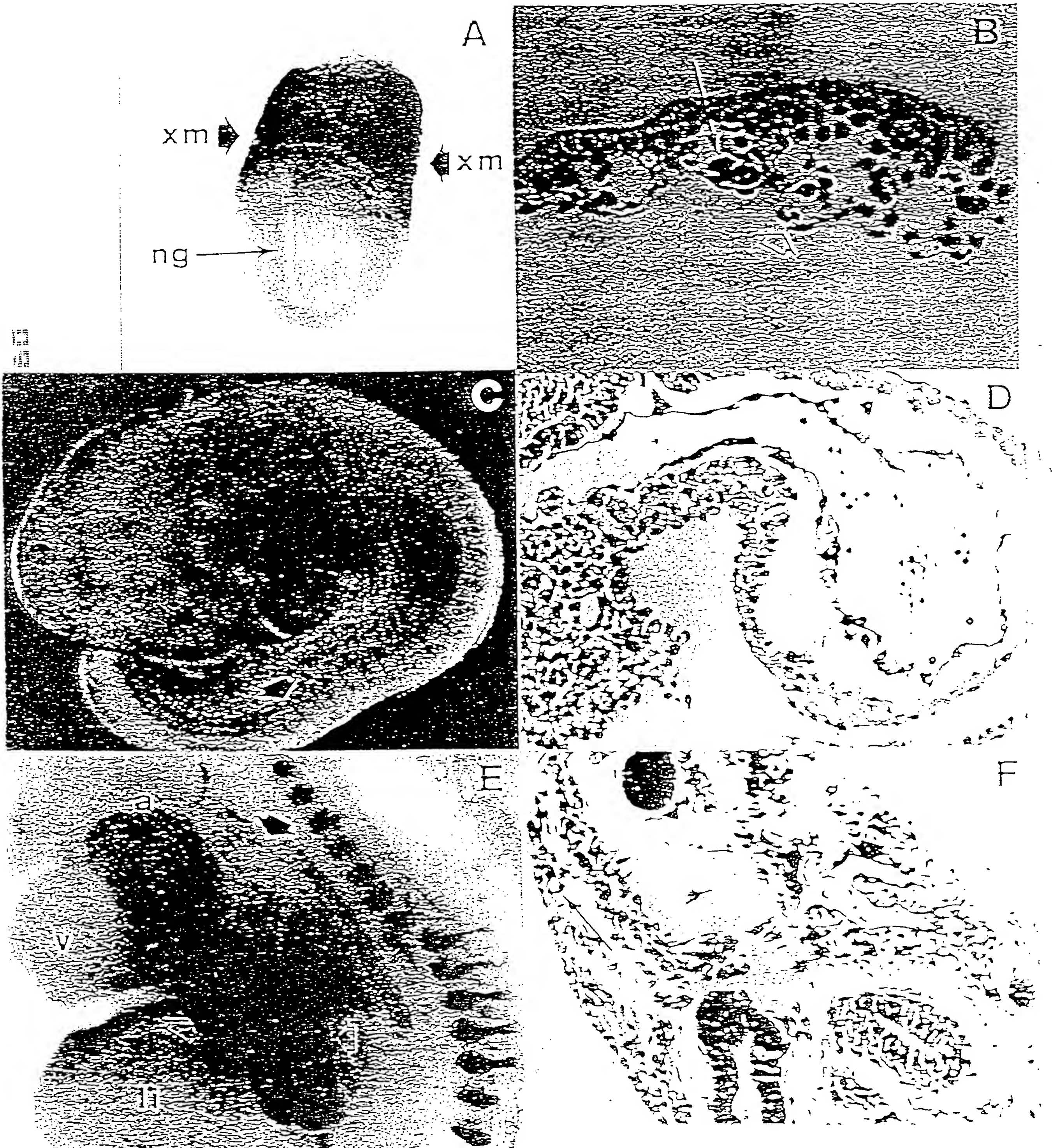
TGCCACATTT TGTTACCATG ▼GAGTCCTCTG TAAGAACTTT ATTAGATAAA TCATCTTTAC 2280

EcoRI

ACTATAATTT GAATAAAAGC ▼CGGAATTC 2308

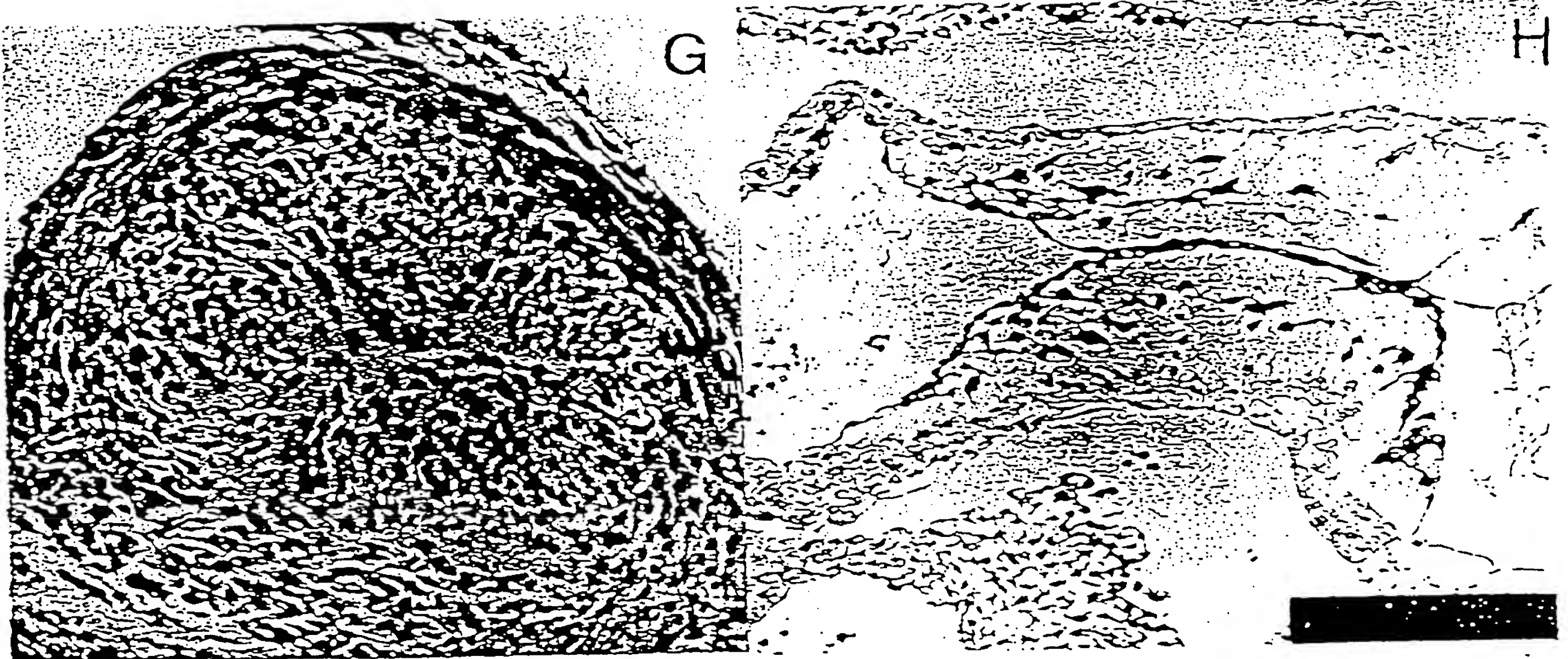
8907-034 (sheet 23 of 37)

Figure 13 A - 13 F



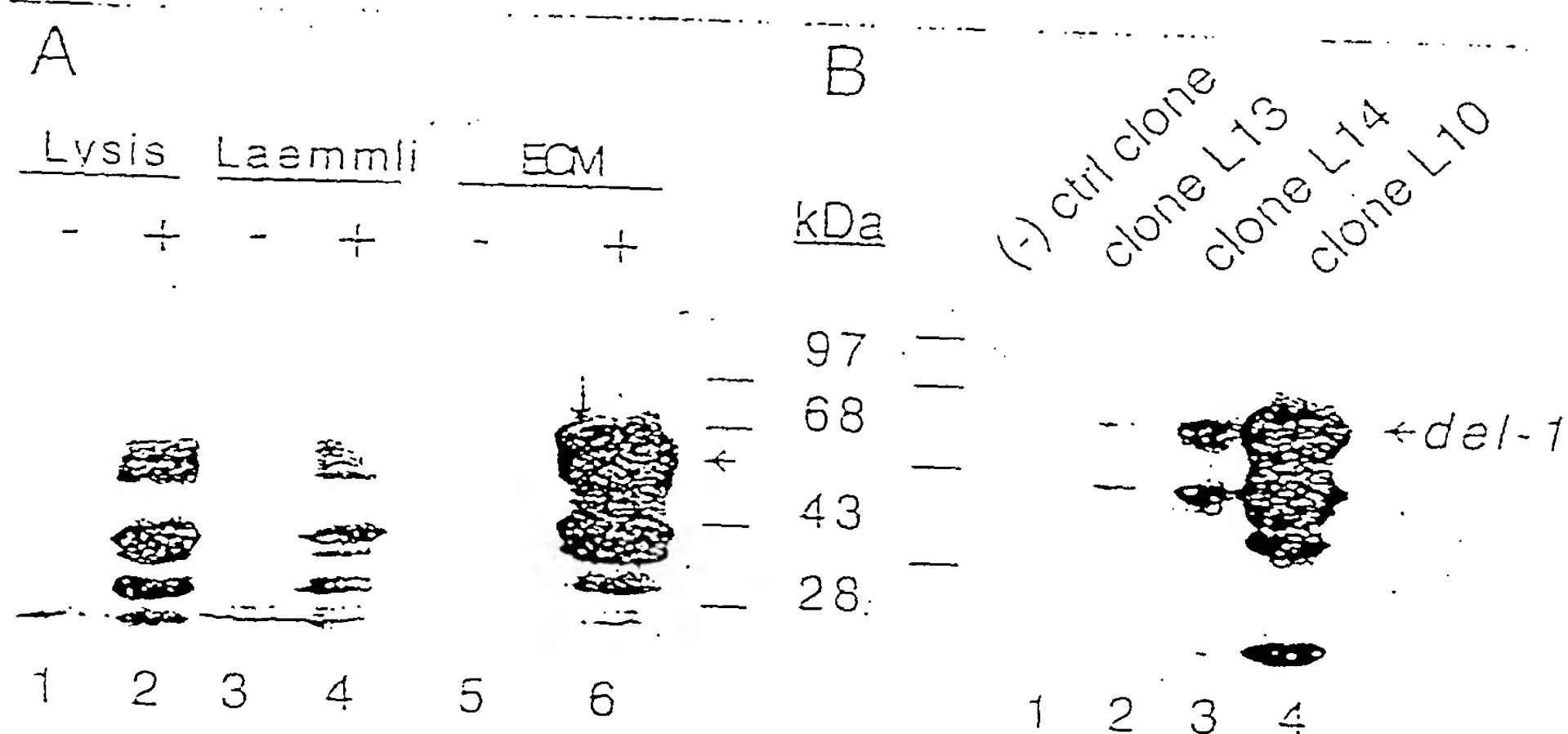
8907-034 (Sheet 24 of 32)

Figure 13G and 13H



8907-034 (sheet 25 of 32)

Figure 14A and 14B



8907-034 (Sheet 26 of 32)

Figure 15A

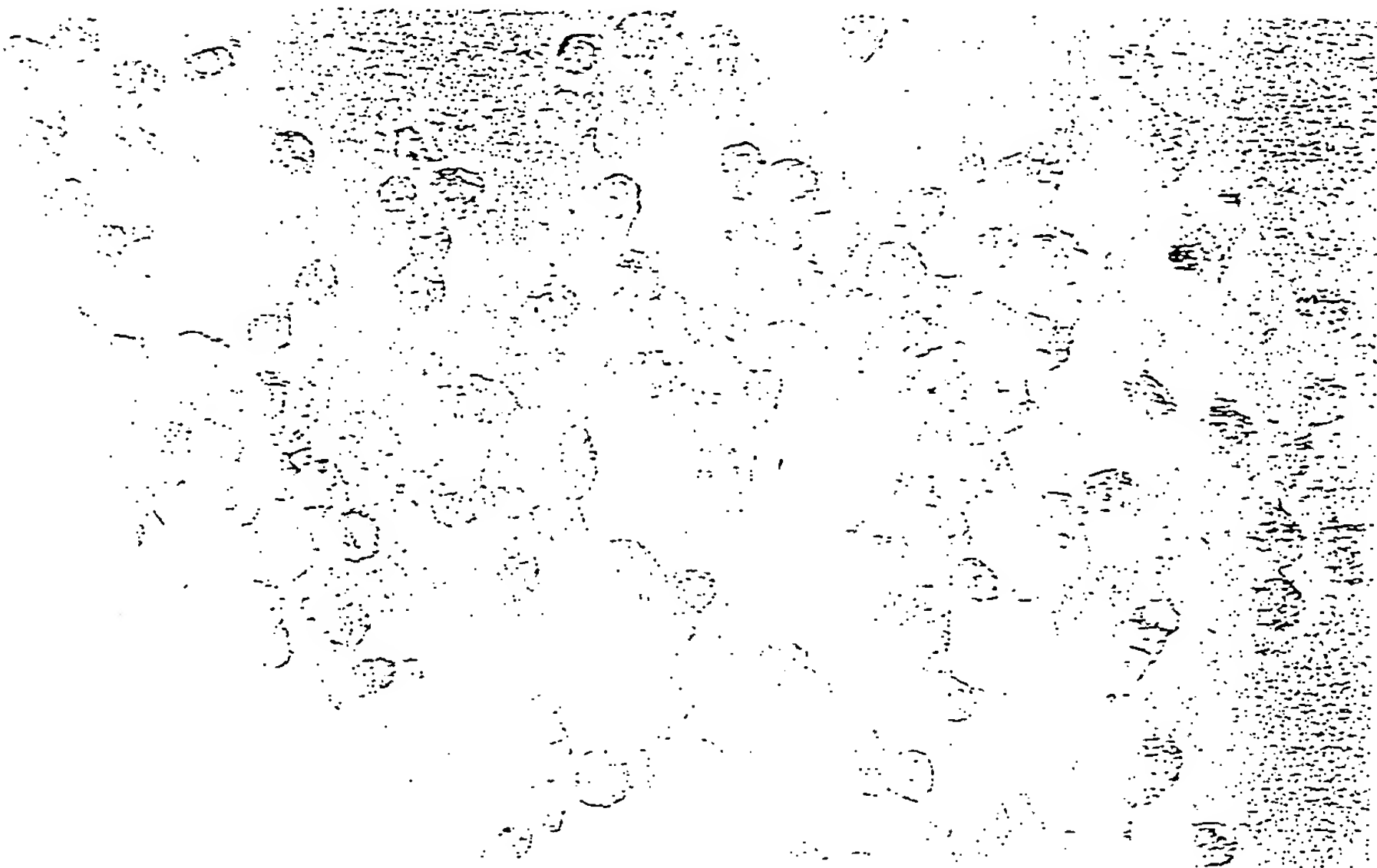
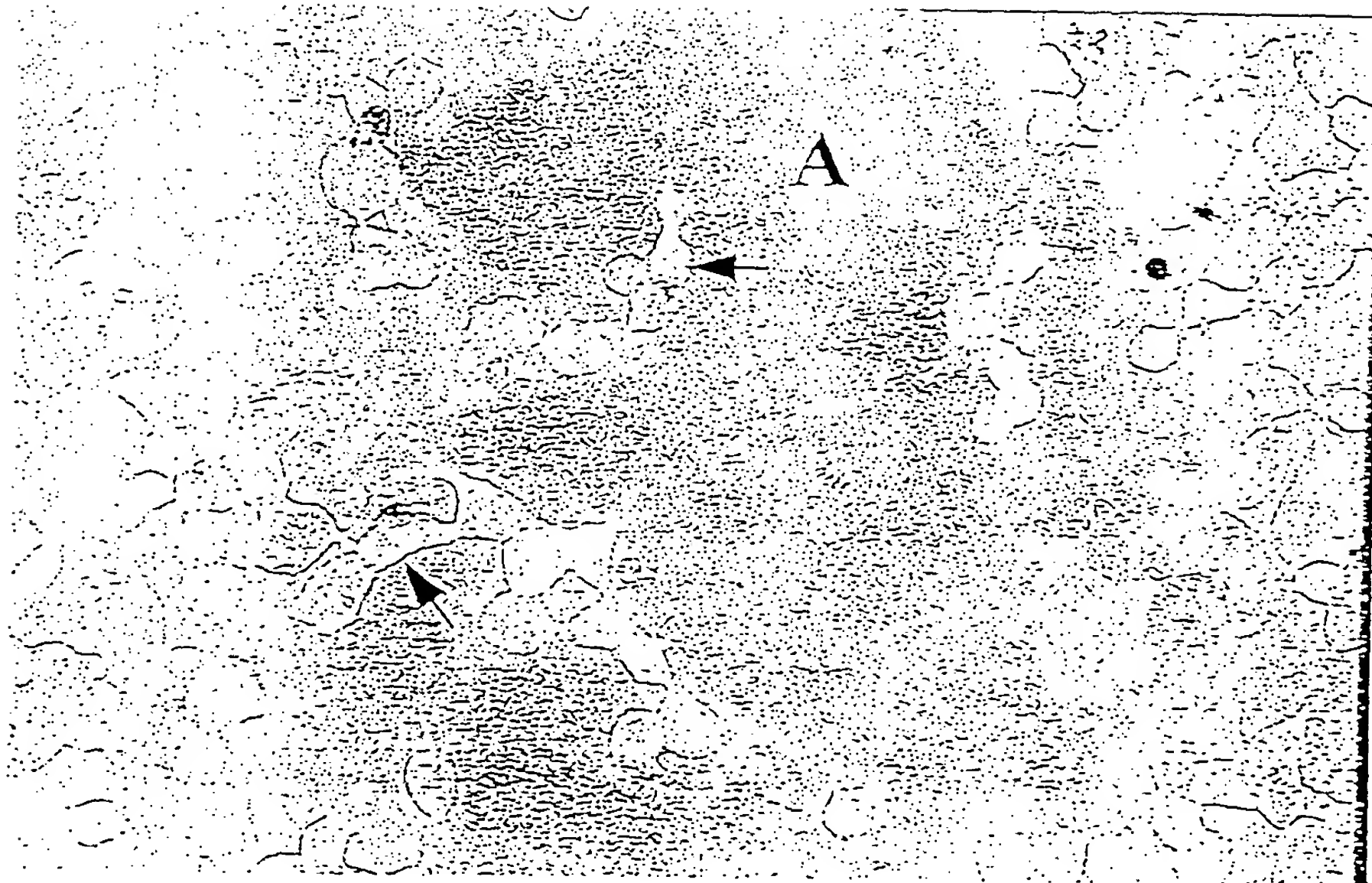
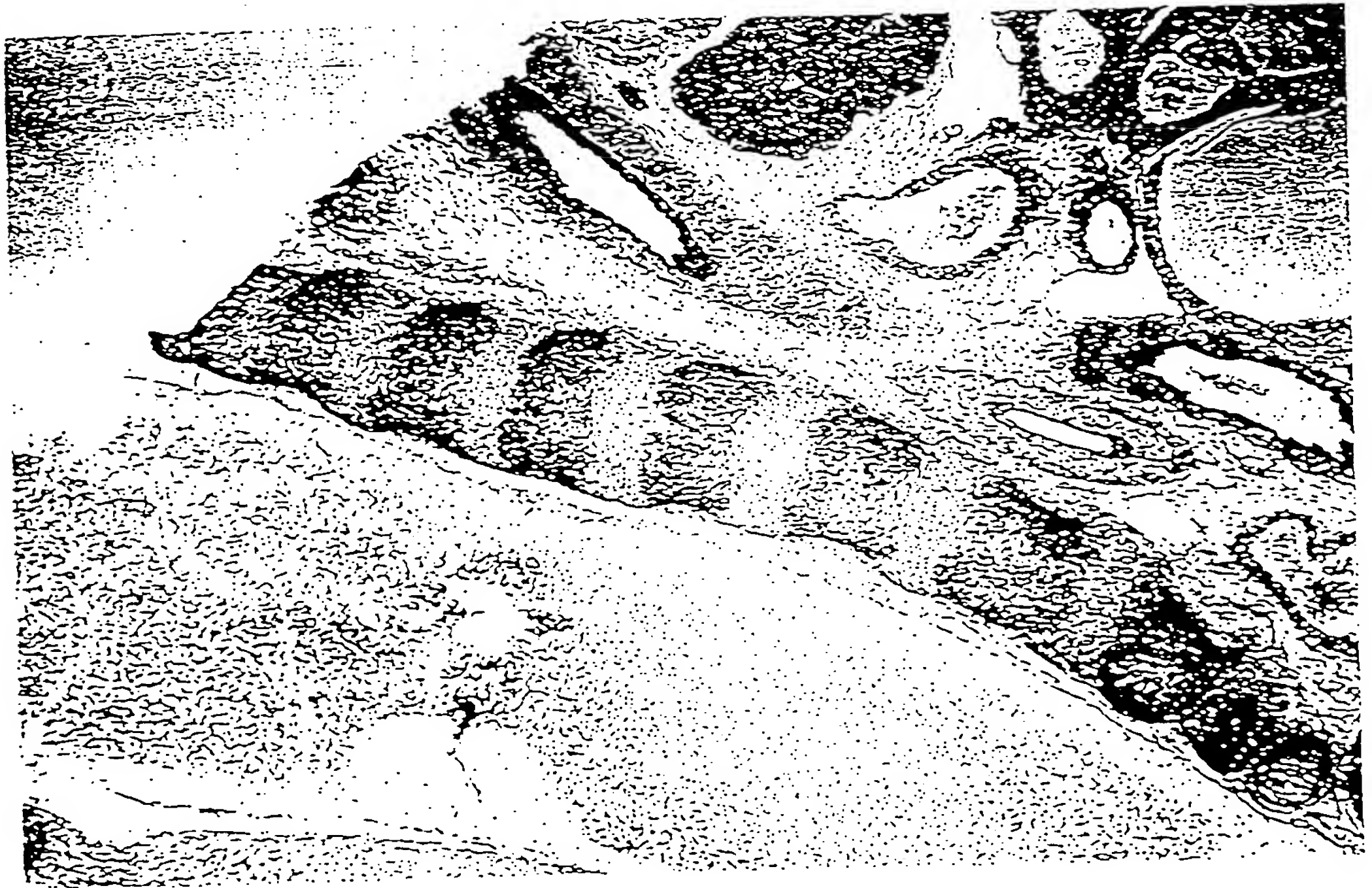


Figure 15B

8907-034 (Sheet 27 of 32)

Figure 16



8907-034 (Sheet 27 of 32)
Figure 16

8907-034 (Sheet 28 of 32)

Figure 17A

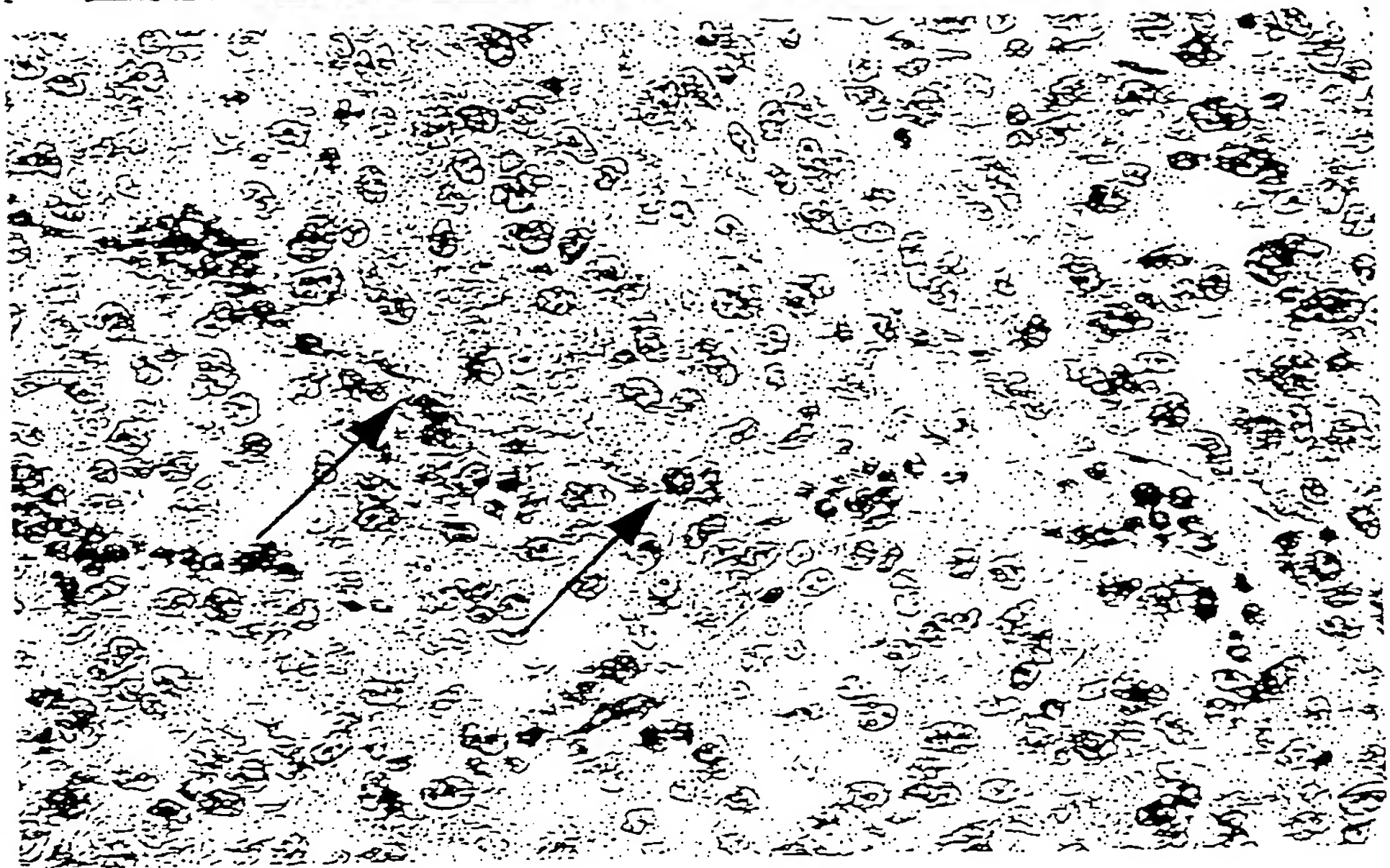
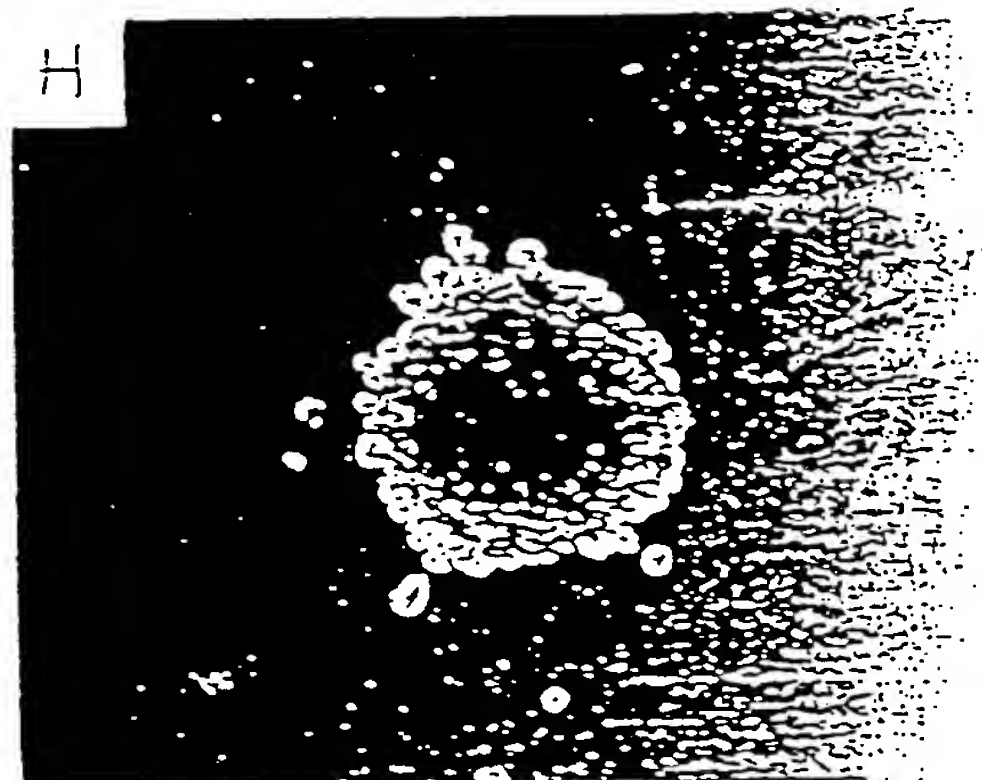
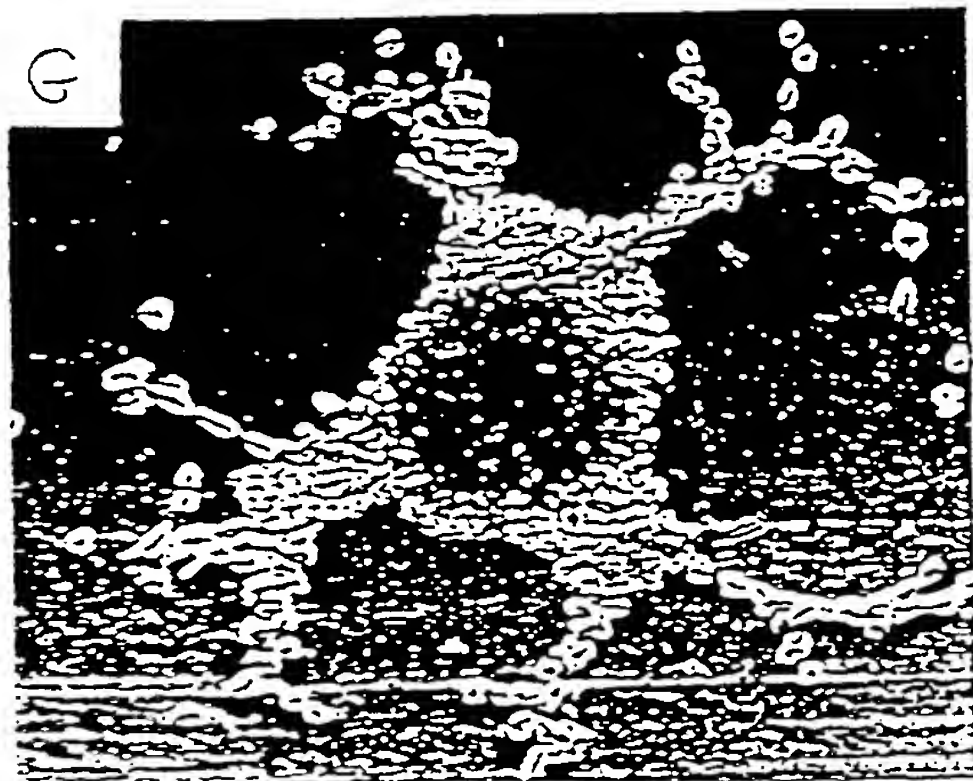
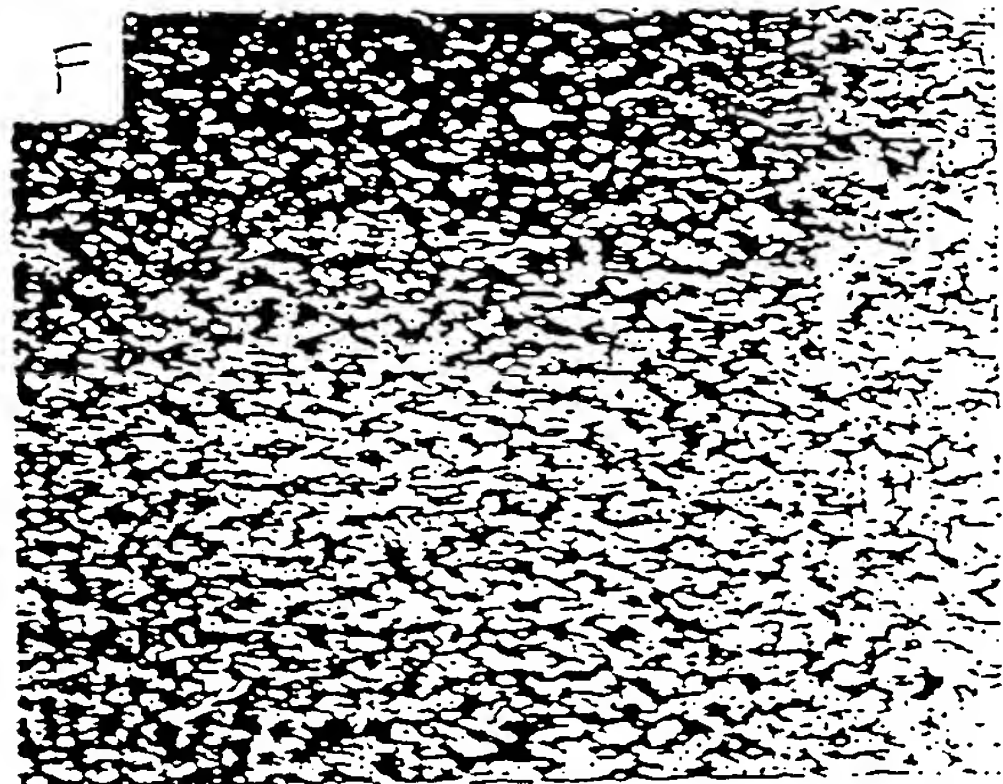
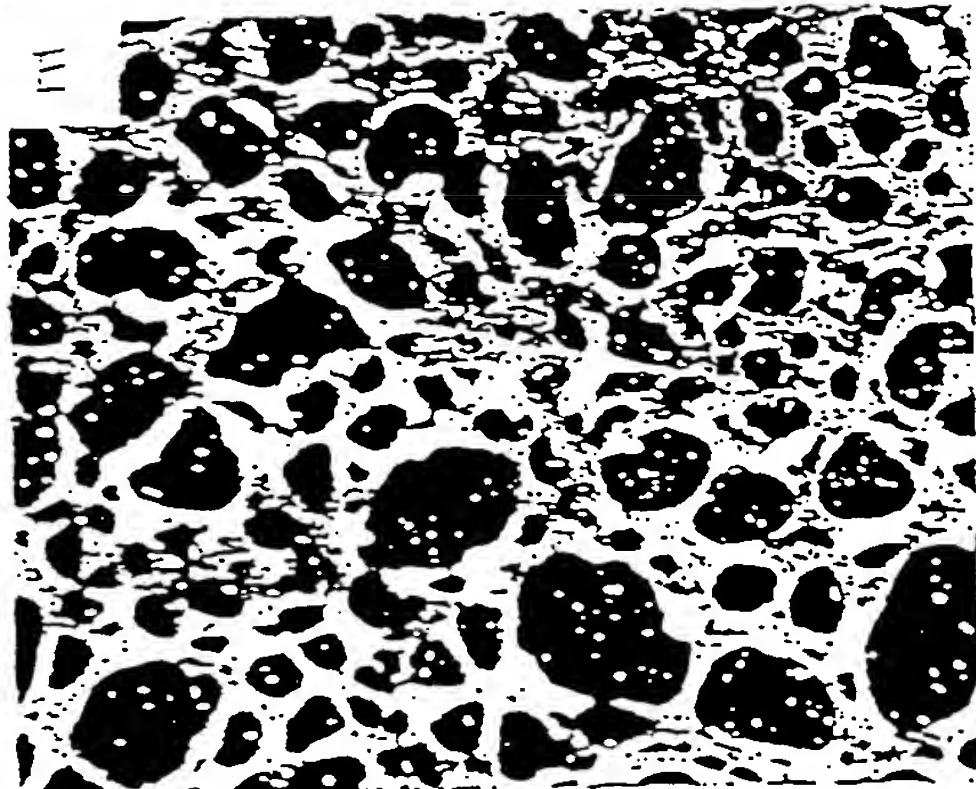
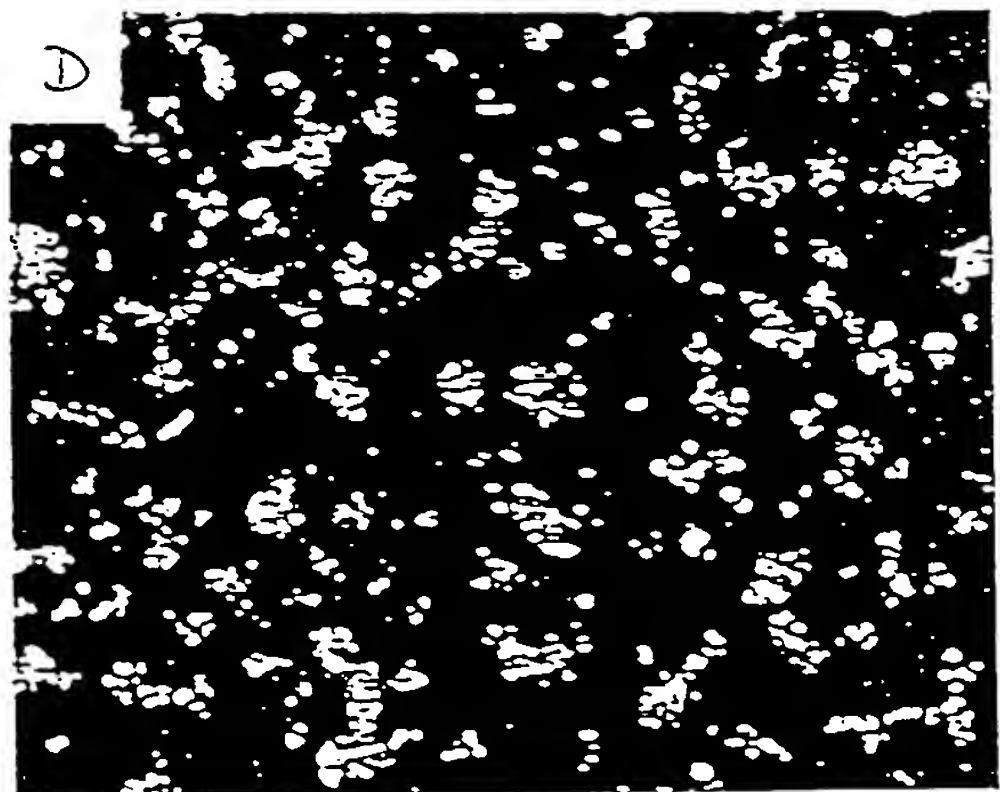
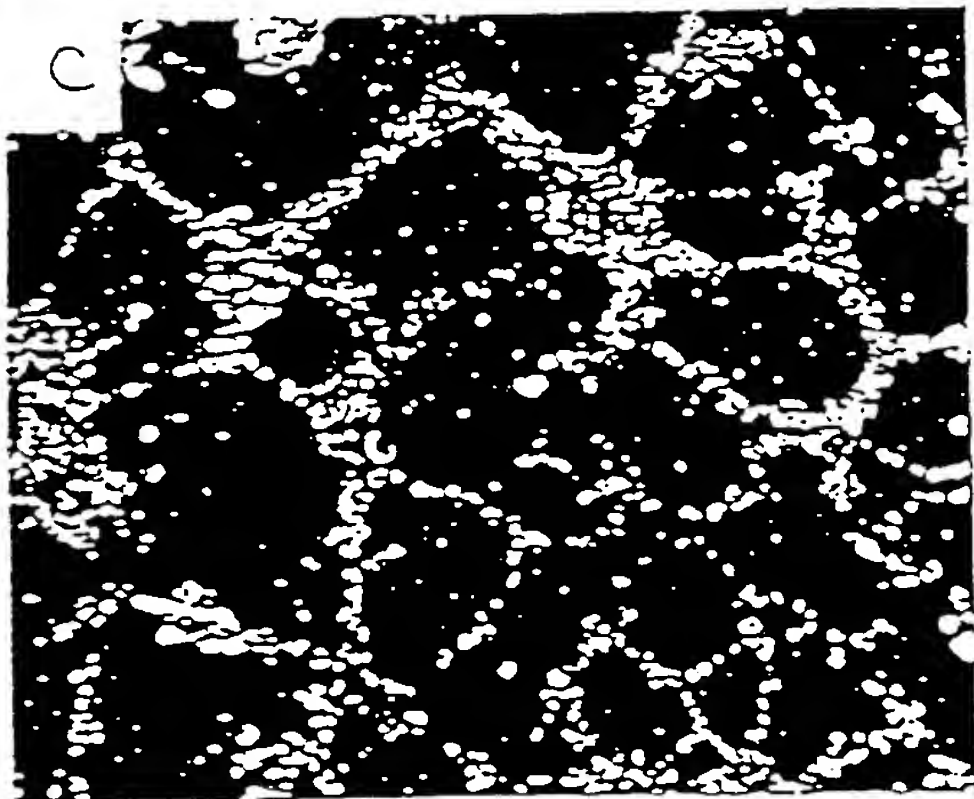
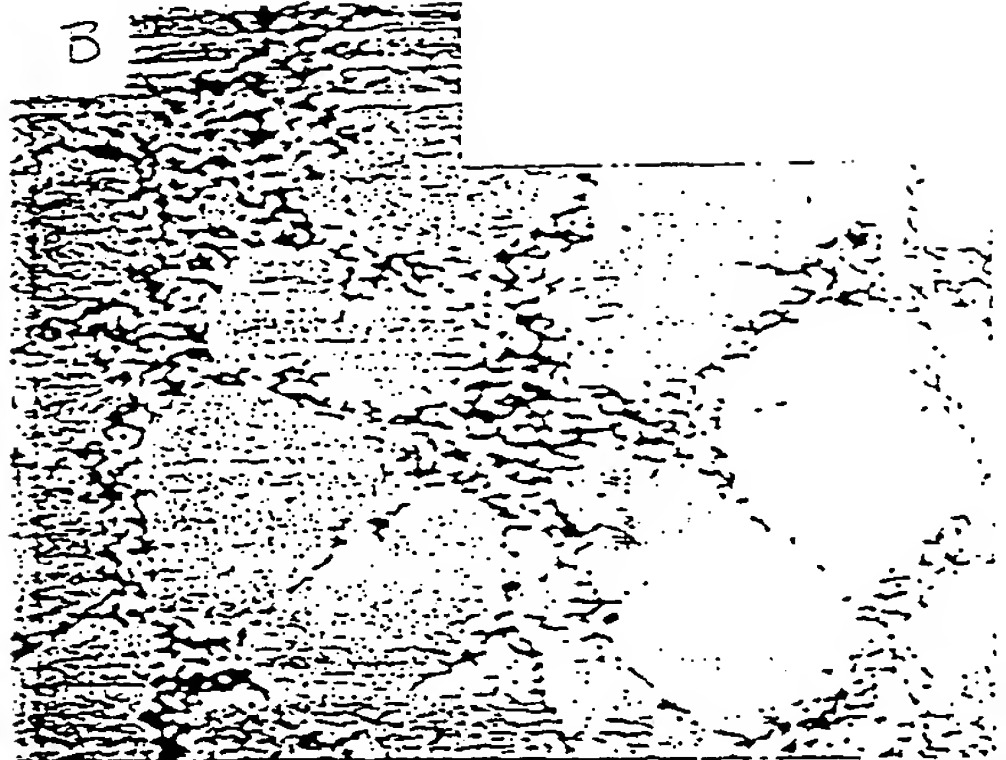
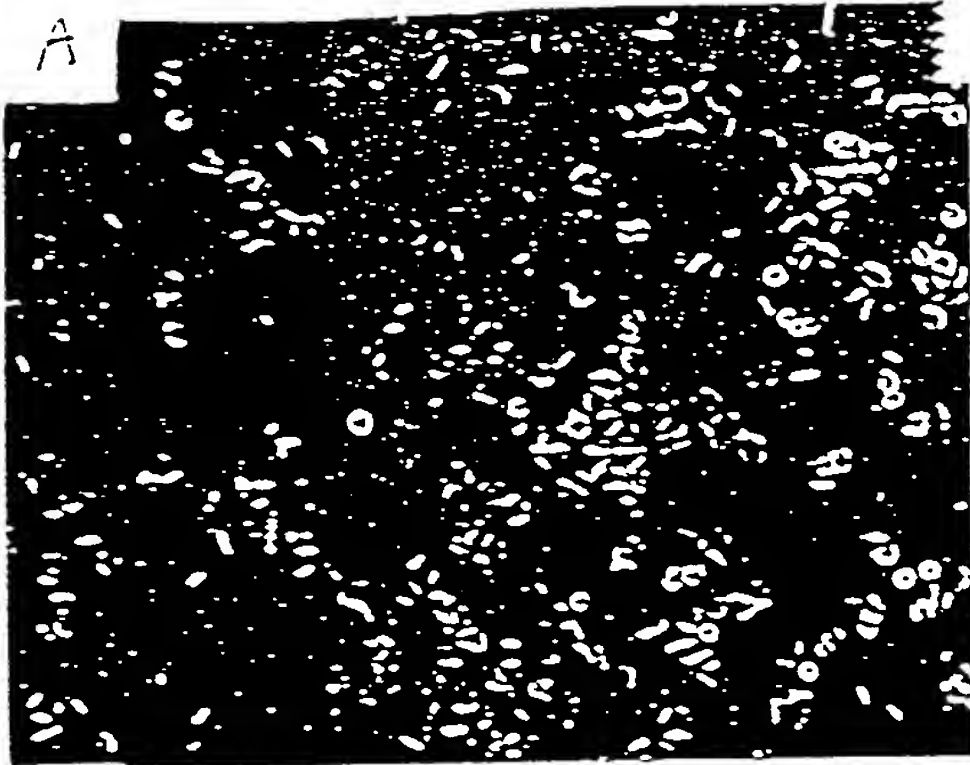


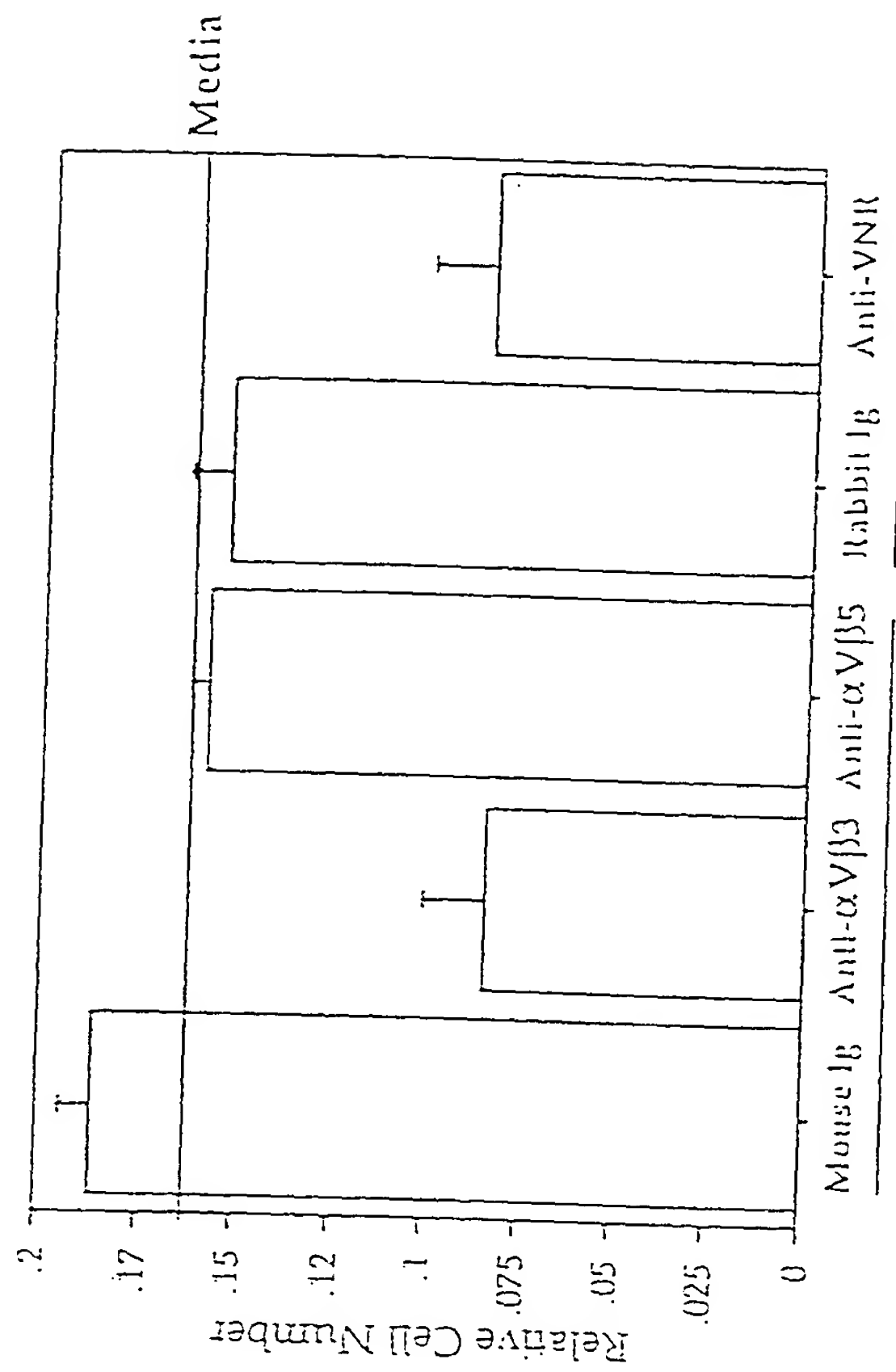
Figure 17B

8907-034 (Sheet 29 of 32)
Figure 18 A - 18H



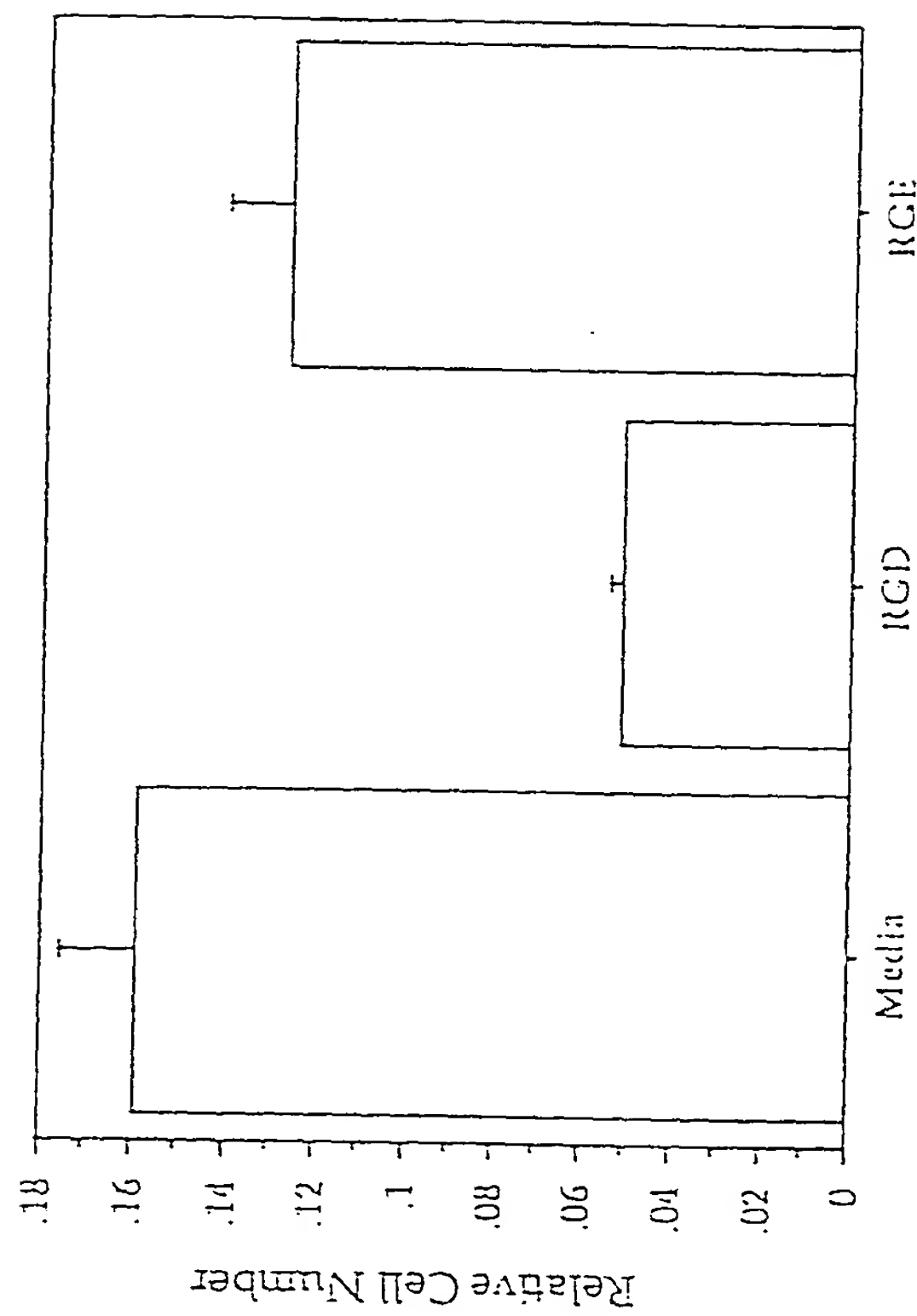
8907-034 (Sheet 30 of 32)

Figure 19



8907-034 (Sheet 31 of 32)

Figure 20



8907-034 (Sheet 32 of 32)

Figure 21A



Figure 21B

